

UGRA

Display Analysis & Certification Tool

Report

Basics

Date: 2011-2-16 13:12:32
Report-Version: v1.3.1
Monitor-Name: \\.\DISPLAY1
Profile: C:/Windows/system32/spool/drivers/.../16.02.11-5800K-18-120cd-trc.icc
Created: 2011-2-16 13:08
Measurement device: eye-one pro

Summary

The monitor has passed the certification according to the UGRA DACT specifications.

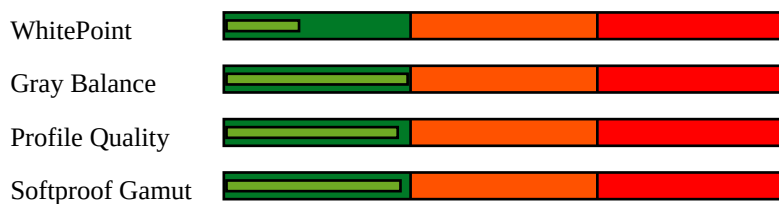
Calibration

White Point	yes
Gray balance	yes
Profile quality	yes

Softproofing

MultiColor, HighBody	no
Offset/Gravure Paper Type 1/2	no
Offset on uncoated paper	yes
Newspaper Printing	yes
sRGB	yes
AdobeRGB	no
ECI-RGB	no

Diagram



Whitepoint

The whitepoint should be as close as possible to the black body curve and the calibration target. The maximum allowed distance to the target whitepoint is DeltaE 2.0.

XYZ:	114.59 120.39 116.18
XYZ (normalized):	95.18 100.00 96.51
Luminance:	120.4 Cd/m2
Next Temperature:	5772 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.8 deltaE

Blackpoint

The blackpoint is not defined in ISO 12646. Therefore UDACT does only measure but not assess it.

Luminance:	0.5 Cd/m2
Chromaticity:	0.7 Chroma (Lab)

Gray balance

Average and maximum calculation will respect measurements with 1% minimum luminance only. The maximum allowed deviations to comply with this test are an average of DeltaC 1.0 and a range of DeltaC 2.0.

%	Kelvin	Cd/m2	L	Chroma	Gamma
0	6307	0.55	4.11	0.72	
5	6035	1.13	8.45	0.60	1.78
10	5786	2.45	15.66	0.47	1.81
15	5808	4.45	22.64	0.69	1.80
20	5724	7.26	29.49	0.47	1.80
25	5769	10.05	34.70	0.49	1.83
30	5743	14.13	40.80	0.25	1.81
35	5744	17.99	45.56	0.45	1.83
40	5818	23.25	51.05	0.30	1.81
45	5748	28.31	55.60	0.19	1.83
50	5771	34.33	60.35	0.61	1.82
55	5809	40.35	64.58	0.94	1.83
60	5813	47.25	68.93	0.96	1.83
65	5772	54.63	73.14	0.86	1.84
70	5784	62.50	77.23	0.48	1.84
75	5793	71.09	81.32	0.19	1.84
80	5783	79.86	85.17	0.46	1.84
85	5823	88.00	88.49	1.49	1.89
90	5777	97.90	92.27	0.84	1.93
95	5786	109.07	96.24	0.34	1.90
100	5772	120.39	100.00	0.00	
Average	5780			0.55	1.83
Range				1.96	
Max				1.49	

Tone values = 95.7%

Through the calibration of a display tone values can be lost. A display for the printing industry should show at least 95% of the incoming tone values.

Profile Quality

This test displays and measures RGB values and compares them with the transformation of the profile. The maximum allowed deviations to comply with this test are an average of DeltaE 3.0 and a maximum of DeltaE 6.0.

The assumed chromatic adaptation is: CAT02

RGB	Lab	deltaLab	deltaE
0 0 0	4.1 -0.0 -0.7	-4.1 0.0 0.7	4.2
0 0 128	14.5 47.4 -75.1	-0.8 1.1 -1.6	2.1
0 0 255	28.0 74.9 -117.1	1.0 -1.6 1.1	2.1
0 128 0	52.5 -45.8 58.1	0.4 0.5 3.4	3.4
0 128 128	54.0 -27.0 -11.5	0.7 0.1 1.6	1.7
0 170 255	68.9 -13.0 -50.4	1.0 -0.3 2.3	2.5
0 255 0	87.8 -68.5 95.1	0.3 -0.2 -2.2	2.2
0 255 170	89.0 -53.8 20.9	0.4 -0.4 0.3	0.7
0 255 255	90.2 -40.1 -16.3	0.6 -0.6 1.4	1.6
85 85 85	44.2 0.3 -0.1	-0.2 -0.3 0.1	0.4
128 0 0	31.2 44.7 41.0	-1.0 1.3 5.3	5.6
128 0 128	34.6 57.3 -41.0	-0.6 -0.2 -1.4	1.5
128 128 0	59.4 -11.8 67.1	-0.2 0.6 2.4	2.5
128 128 128	60.7 0.3 -0.5	-0.0 -0.3 0.5	0.6
128 128 255	64.0 22.4 -58.0	0.2 -0.4 0.8	0.9
128 255 128	91.9 -42.0 46.1	-0.1 -0.7 -0.7	1.0
170 0 255	47.3 79.7 -84.3	0.2 -1.1 -0.2	1.1
170 170 170	74.9 0.4 -0.3	0.0 -0.4 0.3	0.4
170 255 0	93.1 -39.7 102.2	-0.2 0.1 -3.1	3.1
170 255 255	95.5 -17.9 -7.5	-0.1 -0.5 0.1	0.6
255 0 0	53.8 69.4 73.2	0.1 0.2 0.4	0.4
255 0 170	56.2 79.2 -27.3	0.5 -1.0 -0.4	1.2
255 0 255	59.0 87.5 -64.2	0.6 -1.2 0.2	1.3
255 128 128	72.4 35.0 18.8	0.2 0.2 0.2	0.3
255 170 0	79.9 11.1 92.1	0.1 1.4 -1.1	1.8
255 170 255	82.9 31.1 -26.9	0.3 0.1 0.8	0.8
255 255 0	97.8 -17.8 109.1	-0.1 0.8 -4.0	4.1
255 255 170	98.9 -8.6 37.0	-0.1 0.1 -1.0	1.0
255 255 255	100.0 0.0 0.0	-0.0 0.0 -0.0	0.0
170 85 85	53.6 28.0 15.2	-0.2 -0.3 -0.2	0.5
85 170 85	68.4 -34.0 35.4	0.1 0.4 0.3	0.5
85 85 170	46.6 18.1 -45.4	0.2 -0.8 0.4	0.9
85 170 170	69.6 -20.8 -9.0	0.3 -0.1 0.9	0.9
170 85 170	55.4 38.9 -30.6	-0.0 -1.0 0.1	1.0
170 170 85	73.8 -9.4 43.8	-0.1 0.2 -0.1	0.2
Average			1.5
Maximum			5.6

Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	89 %
sRGB	94 %
AdobeRGB	72 %
ECI-RGB v1.0	68 %

ISO-Gamut

This test displays and measures Lab values and compares them with the reference. The maximum allowed deviations to comply with this test are an average of DeltaE 4.0 and a minimum Gamut volume of 90% for ISOcoated.

Reference	Lab	deltaLab
55.0 -37.0 -50.0	58.7 -11.3 -44.3	26.6
66.9 -24.7 -37.1	66.7 -19.1 -38.1	5.7
79.7 -12.5 -21.8	79.3 -12.5 -22.5	0.9
48.0 74.0 -3.0	50.2 68.9 1.1	6.9
60.8 50.6 -6.7	60.9 51.1 -6.8	0.5
76.4 25.8 -6.9	76.2 26.0 -6.9	0.3
89.0 -5.0 93.0	88.9 -5.6 94.9	2.0
90.3 -4.7 62.6	89.9 -4.9 63.0	0.7
92.2 -3.5 31.1	91.8 -3.3 31.7	0.7
53.1 37.7 28.9	53.2 37.2 28.4	0.7
41.5 22.7 16.8	42.1 23.0 15.6	1.3
31.9 40.0 24.0	33.0 38.6 22.7	2.2
32.5 44.4 -1.8	33.5 43.7 -1.0	1.4
51.3 1.3 44.5	51.5 0.8 42.8	1.7
34.6 -36.4 13.9	35.7 -27.4 12.9	9.1
36.0 -26.2 -20.9	37.6 -15.6 -18.0	11.1
20.9 9.6 -23.6	22.2 9.4 -22.5	1.8
89.0 0.0 -1.8	88.3 0.7 -3.1	1.6
82.8 0.0 -1.7	82.5 0.5 -2.4	1.0
69.3 0.0 -1.4	68.9 0.3 -1.5	0.6
54.1 0.0 -1.0	54.1 0.2 -1.0	0.2
36.6 -0.0 -0.5	37.0 1.1 -1.2	1.4
16.0 0.0 0.0	18.0 0.3 -0.4	2.1
24.0 22.0 -46.0	24.5 22.0 -44.7	1.4
40.9 17.9 -36.6	40.9 18.6 -37.3	1.0
63.7 10.3 -23.8	63.3 10.6 -24.0	0.5
47.0 68.0 48.0	48.4 64.0 48.6	4.3
58.5 47.1 37.9	58.5 46.8 37.9	0.3
74.2 22.9 21.4	74.2 23.0 21.3	0.1
50.0 -65.0 27.0	52.8 -41.1 30.3	24.3
62.1 -39.8 21.0	61.4 -39.9 19.7	1.5
77.0 -19.1 11.0	76.9 -19.1 11.4	0.4
71.2 18.8 17.3	70.8 18.9 16.5	0.8
71.2 22.2 73.1	70.9 21.6 72.9	0.6
47.7 71.2 16.2	49.5 66.9 20.0	6.0
38.0 55.4 -20.9	38.7 55.2 -19.0	2.0
73.7 -22.8 67.6	73.7 -23.6 66.9	1.0
52.3 -52.3 -20.2	55.6 -26.1 -14.6	26.9
43.3 -17.0 -48.6	45.5 -3.4 -45.0	14.3
95.0 0.0 -2.0	94.5 0.8 -3.2	1.5
88.5 -0.4 -3.1	88.2 -0.0 -3.8	0.9
82.0 -0.9 -4.1	81.7 -0.8 -4.9	0.8
67.7 -2.0 -4.4	67.4 -2.3 -4.3	0.4
52.2 -2.5 -3.5	52.2 -2.5 -3.4	0.1
37.5 -3.9 -3.1	37.9 -2.9 -4.2	1.5
26.3 -6.8 -3.4	27.8 -7.2 -2.2	2.0
Average		3.8
Gamut-Volume		89 %

Measurement Data

This table lists all RGB measurements. The XYZ values represent the values from the measurement device.

RGB	XYZ	RGB	XYZ
255 255 255	114.59 120.39 116.18	85 85 170	22.86 19.26 52.24
0 0 0	0.52 0.55 0.58	85 170 170	39.10 48.64 55.78
12 12 12	1.07 1.13 1.13	170 85 170	38.91 28.27 52.76
25 25 25	2.31 2.45 2.33	170 170 85	48.30 55.40 19.93
38 38 38	4.27 4.45 4.39	0 138 206	28.86 32.72 75.19
51 51 51	6.89 7.26 6.89	0 166 220	36.53 44.17 85.43
63 63 63	9.62 10.05 9.80	122 197 231	58.99 67.28 94.72
76 76 76	13.50 14.13 13.64	224 0 102	40.50 22.08 20.97
89 89 89	17.21 17.99 17.43	230 80 142	51.25 34.86 39.29
102 102 102	22.11 23.25 22.60	233 152 190	69.75 60.42 66.27
114 114 114	27.00 28.31 27.29	250 215 25	79.36 88.16 9.47
127 127 127	32.82 34.33 33.41	247 220 93	82.50 90.85 25.01
140 140 140	38.59 40.35 39.58	242 227 160	88.78 96.10 53.30
153 153 153	45.17 47.25 46.35	191 73 64	34.09 25.25 10.96
165 165 165	52.27 54.63 53.27	126 62 57	18.54 15.02 8.82
178 178 178	59.63 62.50 60.73	123 24 31	14.08 8.94 3.45
191 191 191	67.59 71.09 68.74	125 20 63	15.48 9.25 9.34
204 204 204	76.17 79.86 77.54	124 100 36	22.28 23.54 5.84
216 216 216	84.22 88.00 86.68	0 78 45	6.74 10.64 6.43
229 229 229	93.56 97.90 95.33	0 80 97	9.44 12.01 19.53
242 242 242	103.91 109.07 105.76	37 35 66	5.00 4.36 9.98
0 0 128	6.07 2.49 30.18	214 216 220	83.80 87.57 88.90
0 0 255	19.83 7.61 104.00	194 195 199	70.52 73.76 74.25
0 128 0	13.67 24.62 3.19	152 153 155	45.02 47.14 46.90
0 128 128	19.28 26.60 33.46	110 110 112	25.41 26.63 26.31
0 170 255	42.33 48.05 110.46	68 68 69	11.12 11.50 11.53
0 255 0	47.91 85.72 8.75	30 30 30	2.91 3.04 3.00
0 255 170	57.63 89.36 59.69	40 36 106	7.47 5.31 21.79
0 255 255	67.88 93.07 115.17	82 70 137	17.49 14.44 35.95
85 85 85	16.09 16.85 16.32	140 131 182	40.75 38.66 60.19
128 0 0	13.76 7.96 0.99	221 0 30	35.91 20.20 3.62
128 0 128	19.66 10.10 30.53	230 74 63	44.97 31.50 10.90
128 128 0	27.35 32.79 3.71	236 146 128	63.28 56.20 35.16
128 128 128	33.28 34.86 34.02	0 128 56	14.93 25.04 10.02
128 128 255	47.48 40.26 109.03	25 154 94	22.95 35.77 21.43
128 255 128	68.09 96.62 39.96	133 190 154	50.51 61.74 47.81
170 0 255	42.49 20.28 104.82	214 141 127	55.21 50.24 34.38
170 170 170	55.31 57.95 56.20	238 135 31	55.61 49.96 6.74
170 255 0	70.81 99.47 9.47	224 0 72	38.62 21.35 11.74
170 255 255	91.43 107.32 115.86	151 15 104	22.73 12.58 21.12
255 0 0	45.52 25.60 1.60	145 179 42	42.61 55.23 9.93
255 0 170	55.05 28.99 50.81	0 133 139	21.04 28.50 38.16
255 0 255	65.36 32.94 104.99	0 98 166	17.40 18.31 49.83
255 128 128	65.24 52.79 34.63	235 237 242	99.61 104.00 105.39
255 170 0	68.23 67.25 5.91	210 215 221	83.11 87.24 89.59
255 170 255	88.81 74.92 111.72	186 194 201	68.24 71.97 75.54
255 255 0	93.88 112.54 9.90	139 150 156	41.84 44.72 47.10
255 255 170	104.15 116.44 60.85	97 107 111	22.79 24.52 25.76
170 85 85	31.99 25.77 16.73	61 72 75	11.12 12.09 13.28
85 170 85	32.22 46.20 19.45	34 51 51	5.52 6.50 6.83